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PRATT'S
"SULFOCIDE"
SOLUBLE SULPHUR
SUMMER SPRAY

A NEW SUBSTITUTE FOR
BORDEAUX MIXTURE

Far surpassing it in effectiveness, durability and ease of application, at one-half the cost or less.

The most powerful, non-poisonous fungicide for plant life—for rust, mildew, scab, canker, brown rot, etc.

Combined with Paris Green

it sticks better than Arsenate of Lead, controlling *Codling Moth and all worms and chewing insects on fruits and vegetables.*

The Best Repellent for Curculio

Made Only By

B. G. PRATT COMPANY.

H. J. WEBER & SONS NURSERY CO.

NURSERY, MO.

DISTRIBUTING AGENTS

Shipping Point, St. Louis

FUNGICIDES

FOR years fruit-growers and truckers have been endeavoring to get away from the use of Bordeaux Mixture, because of the injury to fruit and vegetables and the difficulty in making a uniform and efficient mixture. Still others (needlessly, perhaps,) have been more or less alarmed at using a poison like blue vitriol on food stuffs.

For several years the B. G. Pratt Company, manufacturers of "SCALECIDE" for the San Jose Scale, have been studying the question of fungicides, and the whole field has been gone over carefully and many experiments made.

This past Winter we began experiments on vegetables in our own experimental plot in Florida, using a new soluble sulphur, which we call "**SULFOCIDE**" (not lime sulphur.) Tomatoes were selected from varieties most susceptible to blight; egg-plants, cucumbers, etc., but a drought of nearly three months' duration, followed by an unusual rainfall, made our experiments of little scientific value, although every indication pointed to the effectiveness of this *most wonderful new discovery*. Fortunately, we gave samples to a large number of truckers in other sections where weather conditions were more favorable, *and in every instance where it was used the results far surpassed our expectations*. Still, we were unwilling to offer for sale something we knew so little about (we have never abused the Public's confidence and would not start at this late day,) so we continued our experiments during the Summer of 1909, samples being sent to many Experiment Stations and fruit-growers. Unfortunately, we recommended strengths two or three times as strong as necessary, and occasionally some scalding resulted; some thinking that our recommendation was too low, used it at still greater strengths.

GENERAL DIRECTIONS

We give you below the results from the experiments which have been *practical*, which will warrant you in *making a trial of this new fungicide, no matter how large*.

FOR VEGETABLES, such as *potatoes, tomatoes, egg-plant, cucumbers, beans, cantaloups*, etc., and all plants subject to *blight, rust, mildew*, etc., use one part of "SULFOCIDE" to 150 or 200 parts of water. If *flea beetles, worms* or *any chewing insects* are present or expected, add one pound of Paris Green to this quantity of mixture. Apply with a fine nozzle and high pressure every ten days or two weeks, until the danger is past.

"SULFOCIDE" *does not readily wash off*. After ten days of almost daily rains, it was plainly discernible on apple leaves. No other fungicide or insecticide will stand this test.

For *apples, pears* and *quinces*, use 1 gallon "SULFOCIDE" to 150 gallons water, with 1 pound of Paris Green added. *If you have sprayed with "SCALECIDE" for the San Jose Scale in the Spring*, it will not be necessary to spray for fungous troubles before the blossoms open. If not, spray as soon as the leaves unfold, before the cluster buds are formed. Spray with "SULFOCIDE" and Paris Green as soon as the blossoms fall; not later than ten days after—the sooner the better. Five days will show a difference in results.

If the spraying is thoroughly done, forcing the spray well into the calyx end of the newly-formed fruit, the usual second spraying can be omitted, and *one spraying will be found much more effective than two thorough sprayings with Bordeaux and Arsenate of Lead*. This one spraying will control the *black rot, scab, canker, codling moth, and plum curculio* which has been most destructive on apples in many sections. For the second brood of codling moth, repeat seven weeks after first spraying, using 1 part of "SULFOCIDE" to 150 parts of water, or use plain Arsenate of Lead.

Grapes.—Spray with 1 part "SULFOCIDE" to 200 parts of water.

1st. When the shoots are 8 inches to 1 foot long.

2nd. Just after blooming.

3rd. When berries are the size of peas.

4th. When berries are one-half grown.

5th. When berries are three quarters grown.

Peaches and Plums.—Unfortunately, all of the experiments were made at too great a strength, 1-100, and we would advise one to 200 or even 300 parts of water.

One part of "SULFOCID" to 500 parts of water will control mildew and rust on roses.

Get Farmers' Bulletin No. 243, Department of Agriculture, Washington, D. C., for fuller directions as to time to apply fungicides for different diseases.

HOW TO MIX

"SULFOCID" mixes instantly with a little stirring in any proportion of cold water.

Mix the Paris Green up in a paste with a little water, and add to the solution of "SULFOCID."

Where green aphid is present, "SCALECID" and "SULFOCID" may be combined. Mix one part of "SCALECID" in 50 parts of water and one part of "SULFOCID" in 100 parts of water; then pour the two mixtures together.

Experiments were made in the orchards of the *Fairview Orchard Company, at Kearneysville, W. Va.*, this Spring. Rows of Ben Davis, York Imperial and Wine Sap of the same age were selected. One row of each was sprayed the same day with "SULFOCID" and Paris Green and adjoining rows with Bordeaux and Arsenate of Lead. A few trees were left for checks. Ten days later the Bordeaux and Arsenate of Lead trees had a second application. Nothing further was done to the "SULFOCID"-sprayed trees.

Two weeks later a careful examination was made of these trees. On the check trees, with hardly an exception, every apple was stung one to three times by the curculio. The trees sprayed with Bordeaux and Arsenate of Lead twice showed 75 per cent. to 80 per cent. of the fruit more or less stung. The Bens were badly scalded by the Bordeaux. The fruit on trees sprayed with "SULFOCID" and Paris Green were almost perfect, not over 5 per cent. or 10 per cent. showing any sting or blemish whatever, and fully one-fourth larger than any of

the other fruit. This difference has been maintained throughout the season. The Bordeaux-sprayed apples had a third spraying with Arsenate of Lead in July. There was no further application on the apples sprayed with "SULFOCIDE," yet there are remarkably few marked by the second brood of codling moth.

Mr. Fred. Merkel, of Summerfield, Ill., who bought the apples from the Fairview Orchard Company, writes us the following, in regard to the "SULFOCIDE" apples:

"I have bought and packed apples for years and handled many thousand barrels over the table, and am somewhat of a judge of good apples.

"I can say the apples I packed for C. E. Jones, Kearneysville, W. Va., where he showed me were sprayed with Pratt's new 'SULFOCIDE,' were far much finer in size and color, and they were very noticeable as they came on the sorting table, compared with what Mr. Jones said were sprayed with Arsenate of Lead and Blue Stone."

Mr. George T. Powell, of Ghent, N. Y., President of the Agricultural Experts Association, 5-7 East 42nd St., New York City, gave us the following results from his experiments with "SULFOCIDE" this past Summer:

"In the test which we have made the present season with 'SULFOCIDE,' we have had some practical results.

"This used to be a great potato section. I have known over 100 carloads of potatoes to be shipped from this Station in a single season, but since the potato blight has infested the place, potatoes have been shipped to this same Station by the carload from the West to supply farmers.

"Potato blight is a fungous disease that affects the foliage of the plant, checks its development and likewise the growth of the tubers, which frequently cause a failure of the crop.

"In nearly all cases the blight is preceded by the presence of a small, black flea beetle, which punctures the leaves of the plants, leaving small pin-holes. This injury exposes the foliage to fungus attack, and blight usually follows.

"Bordeaux Mixture has been used extensively for the blight, with Arsenate of Lead added, to kill the potato beetles.

"We applied the 'SULFOCIDE,' one gallon to 150 gallons of water, and sixteen ounces of Paris Green added, for the beetles, as Arsenate of Lead cannot be used with 'SULFOCIDE.' We made three applications after the plants were five inches high, about ten

days apart, and we have had good foliage a full month longer than usual, with a very good crop of potatoes of excellent quality secured. The 'SULFOCIDE' acts as a repellent upon the flea beetle, while the Paris Green seems to combine and remain on the foliage even longer than the Arsenate of Lead, of which there is a good deal of very poor quality being put upon the market.

"We applied the 'SULFOCIDE' to Melons (the Cantaloup,) and have the finest crop and freest from blight that we have ever grown. This was applied twice at the rate of one gallon to 200 of water. Grapes were sprayed twice, 1 to 185, and they have been very free from the brown rot, which has been disastrous in many sections.

"We have abandoned the use of Bordeaux Mixture on our apples, as for the past three years it has seriously injured both the fruit and foliage. Where 'SULFOCIDE' was applied, 1 to 150, the fruit is now very fine and free from the curculio injury, which has been very injurious the past season. We are inclined to believe a most valuable fungicide has been brought out in 'SULFOCIDE,' and shall use it on a larger scale another year."

Prof. John B. Smith, of the New Jersey Experiment Station, New Brunswick, N. J., writes:

"We have used 'SULFOCIDE' altogether too strong for certain purposes, and in another direction our results have been unsatisfactory because of the character of the season. I can say this much: that as against red spider, the material is almost specific. It cleans them out better than anything that I know of. As against mildew on roses, it is absolutely perfect."

Prof. C. B. Waldron, of North Dakota Agricultural College, writes as follows:

"We used the 'SULFOCIDE' freely on the carnations in the greenhouse last Winter with what seemed to be favorable results—that is, the plants remained free from disease and reasonably free from green lice. We shall have further occasion to use it this Winter on the plants in the forcing house."

Mr. J. G. Truitt, Fulford, Dade County, Florida, writes:

"I used the quart of 'SULFOCIDE' on egg-plant for red spider, using 80 parts water to 1 of 'SULFOCIDE.' After the second application I found the plants perfectly free from the spider, using the second application about six days after the first one."

Mr. C. Klam, Capital City Nurseries, Olympia, Washington, writes as follows:

"We used the '**SULFOCIDE**' according to directions, and we believe it is all right. We only had enough for one trial, but it seemed to work."

The Brant-Hentz Flower Company, Madison, N. J., writes:

"As per your inquiry of April 6th as to what results we obtained from the use of your '**SULFOCIDE**,' we wish to state that we used it on **rose plants** for **mildew**, using 1 part of '**SULFOCIDE**' to 500 parts of water, and find that it keeps the mildew back without doing any damage to the foliage."

The Brant-Hentz Flower Company have duplicated their order four times.

Mr. R. C. Driver, City Forester, Lynchburg, Va., writes:

"Referring to my experience with your preparation, '**SULFOCIDE**,' I beg to say that it has given very satisfactory results, **treating roses, lilacs and young nursery stock** in general against mildew."

Mr. H. C. Marshall, Kearneysville, W. Va., writes as follows:

"My experience with '**SULFOCIDE**' has been very satisfactory, and foliage on the trees sprayed with '**SULFOCIDE**' is decidedly better than on those sprayed with Bordeaux Mixture, and I think the fruit shows a smaller percentage of curculio injury. I think, however, I have a little more moth injury where I used the '**SULFOCIDE**' and Paris Green than where I used Bordeaux and Arsenate of Lead, but the per cent. of injury in either case is small

(NOTE.—Spraying for the second brood of codling moth was not made with '**SULFOCIDE**' and Paris Green)

"I also sprayed a small plot of **potatoes** with '**SULFOCIDE**,' which left the vines free from blight, but owing to a severe drought, did not get much yield from either the sprayed or unsprayed."

Mr. J. H. King, of Diana, Florida, writes that he used "**SULFOCIDE**" on *orange, lemon* and other *tropical fruits*, as well as *beats, beans, pepper, etc.*, and adds:

"I must give all praise to '**SULFOCIDE**,' so far as my experience goes, and shall use and recommend it."

Mr. George P. Bull, of Ojus, Florida, after using "**SULFOCIDE**," writes:

"I must say that '**SULFOCIDE**' is the best thing I have ever used for the purpose of **killing red spider on egg-plants**."

Mr. W. M. Hill, Fort Lauderdale, Florida, writes:

"I used '**SULFOCIDE**,' 80 to 1, on pepper very badly infested with **black aphid**, and added a small teaspoonful of Paris Green to every spray tank, five gallons of spray. I thought I would have to repeat the spraying, although I tried to be thorough. In a few days the aphid were all gone or dead. I never saw any more."

Mr. E. W. Shackelford, of Fort Lauderdale, Florida, used "**SULFOCIDE**" with *marked success on beans* that had stopped bearing on account of *white mould*. After spraying, a new crop appeared and paid him handsomely, picking forty baskets. Those adjoining, not sprayed, were not even picked over. Where *roller worm* appeared, he added Paris Green to the spray.

Mr. Wilfrid Wheeler, Concord, Mass., Secretary of the New England Fruit Show, writes:

"I have used the '**SULFOCIDE**' regularly on **carnations and other green-house plants**, and find that it works well, but as yet have not had sufficient time to test its merits fully. You certainly have the right idea for a sulphur spray. Will write you more fully later."

Mr. Louis Boeglin, Head Gardener, Board of Park Commissioners, Minneapolis, Minn., writes:

"'**SULFOCIDE**' was tested in our green-houses on **Chrysanthemums** affected with mildew. The solution of 1 to 150 was applied with a Mastin automatic sprayer. After the first application the mildew was wiped out without injuring the foliage."

PRICES

50 and 30-gallon barrels,	\$ 1.00 per gallon.
10 " kegs,	12.50
5 " "	7.50
1 " jacket cans,	2.00
1 quart cans,	.75
1 pint cans,	.50

On orders of 10 gallons or over, we prepay the freight.

TERMS:—Cash with order.

Do not use near painted buildings.